

CLAIMS

1. Sealing cap (1) intended for the screw closure of a recipient intended to contain alcoholic beverages, typically a bottle with a neck (2) comprising threading (21) and a pilfer-proof ring (20), equipped with  
5 sealing means and pilfer-proof means, comprising two assembled parts attached in rotational and axial terms:

a) an inner part (3), or insert, made of plastic, comprising a so-called inner head (30) and a so-called inner skirt (31), typically with a rotation axis (12),  
10 with said inner head (30) comprising sealing means and said inner skirt (31) comprising inner threading (32) on its inner surface intended to co-operate with the threading (21) of said neck,

b) an outer part (4), or cap, enclosing and hiding  
15 at least said inner skirt (31), with the outer surface of said inner part (3) and the inner surface of said outer part (4) co-operating in view of said assembly of said inner (3) and outer (4) parts, the cap being characterised in that,

20 1) said inner part (3) carries out all the so-called technical functions of said cap, and comprises pilfer-proof means, with said inner skirt (31) connected by bridges (33) to a guarantee seal (34), intended to be held by the ring of said neck and  
25 separated from said skirt after a first opening of said cap,

2) said outer part (4) carries out all or part of the decorative function of said cap (1), and comprises a so-called outer skirt (41), the length of which is  
30 such that it hides, at least before said first opening of said cap (1), said inner skirt (31) and said

guarantee seal (34), so as to be able to modify the appearance of said cap (1) at will without having to modify said technical functions, with said guarantee seal (34) becoming typically visible after said first opening.

2. Cap according to claim 1 wherein said outer part (4) comprises a so-called outer head (40).

3. Cap according to any of claims 1 to 2 wherein said outer part (4) comprises a straight skirt (41).

10 4. Cap according to any of claims 1 to 2 wherein said outer part (4) forms a rotation surface, of a constant radius or not depending on the height in question.

15 5. Cap according to any of claims 1 to 4 wherein said outer part (4), of any outer shape, and said inner part (3) use mechanical (44, 45) or chemical attachment means, typically by gluing, as the means for said assembly, to said inner part (3).

20 6. Cap according to any of claims 1 to 5 wherein said inner part (3) is a PP insert, equipped with inner threading (32), on which the guarantee seal (34) comprises clips (341).

25 7. Cap according to any of claims 1 to 6 wherein said outer part (4), made of metal or comprising a metal part, is attached to said insert by gluing.

8. Cap according to claim 7 wherein said outer part (4) is made of surface-treated aluminium, typically brushed or anodised, to create a "metallic" colour or appearance.

30 9. Cap according to any of claims 1 to 6 wherein said outer part (4), made of plastic, typically polystyrene, is attached to said insert by mechanical assembly or by gluing.

10. Cap according to claim 9 wherein said outer part (4) is metal-coated.

11. Cap according to any of claims 1 to 10 wherein said guarantee seal (34) comprises an inner ring (340) equipped with fastening components (341), typically clips or hooks, turned towards the inside of said cap, and snapped under said ring (20) such that, during said first opening, the bridges (33) break, with said guarantee seal (34) prevented from moving upwards by the co-operation of said components (341) with said ring (20), and such that said guarantee seal (34), separated from the rest of said cap, becomes the visible proof of said first opening.

12. Cap according to claim 11 wherein said outer skirt (41) comprises bridges (42) attaching it to a so-called outer ring (43), with said outer ring locked upwards by said inner ring (340), typically by means of a lower rim (430) of said outer ring (43), such that, during said first opening, the outer (43) and inner (340) rings are separated from the rest of said cap.

13. Cap according to any of claims 1 to 12 wherein said sealing means typically comprises an added seal (35) or a circular lip (36) attached to said inner head.

14. Cap according to claim 13 comprising an added seal (35) of sufficient diameter to cover the edge (22) of the neck (2) and axial and/or radial compression means on the inner surface of said insert, to apply said seal in a tight manner onto said edge (22) of said neck (2) during said closure.

15. Cap according to claim 14 wherein said axial compression means comprises a circular rib (300) formed on the inner wall of said inner head (30) intended to

compress said seal onto the upper part (220) of said edge (22), typically plane.

16. Cap according to any of claims 14 to 15 wherein said radial compression means comprises an annular extra thickness (310, 302) formed on said inner skirt (31) or on said inner head (30), typically at the bridge (301) between the inner head (30) and the inner skirt (31), and intended to compress said seal onto all or part of the curved part (221), typically inclined, and/or onto the radial part (222), typically vertical, of the edge (22).

17. Cap according to claim 16 wherein said annular extra thickness (310) takes the form of an annular step positioned at the inner annular angle formed at the bridge of the inner head (30) and the inner skirt (31).

18. Cap according to any of claims 14 to 17 wherein said inner head (30) comprises an annular rim (38) with a punched central part, typically opposite the mouth (23) of said neck (2).

19. Cap according to any of claims 14 to 18 wherein, a) said inner head (30) has a thickness ranging from 0 to 0.5 mm, b) said compression means is typically radial, and c) this compression means comprises a curved part (311) with a curvature typically similar to that of the curved part (221) of said edge which is opposite.

20. Cap according to any of claims 14 to 19 wherein the thickness of said compression means is chosen as a function of the thickness  $E_j$  of the seal and the space  $E_o$  between said neck and said cap in particular, such that said recipient is closed in a tight manner by said cap, the thickness of the locally compressed seal or the distance  $E$  between the end of

said compression means and said edge being typically between  $0.2 E_j$  and  $0.7 E_j$ , where  $E_j$  is typically between 1 and 2.5 mm.

21. Cap according to any of claims 14 to 20  
5 wherein said axial and/or radial compression means is an integral part of said insert (3) or forms an added part.

22. Cap according to any of claims 13 to 21  
comprising holding means for said added seal, typically  
10 a holding rim (312) attached to said inner skirt (31).